

Basic Mechanics of Walking

- The participant is learning to move from a base that has two points of contact (two feet together) to a single (one foot) point of contact.
- As soon as a foot (right) is lifted off the ground to move forward to walk, the body's center of gravity needs to be shifted over to the foot (left) that is still in contact with the ground.
Note: A body part moving in any direction will move the body's center of gravity in that direction. A resultant action will need to take place to keep the body balanced, example: shift a body part in the opposite direction, or increase the muscle contraction of the body parts that are creating the new base.
- When the right foot is lifted, the body's center of gravity shifts to the left side of the body. As the left foot is lifted, the center of gravity moves to the right side of the body. Hence, the "teeter-totter" walk of a beginner.
- Start from a standing position facing the direction the movement is in.
- First engage the core and ensure the head, torso, hips, and legs are aligned to create a straight line. Keep the chin up and level. Pull the hips up high to prevent them from 'sinking' on each foot plant.
- When stepping forward keep the legs shoulder width apart. The center of gravity shift must occur before any foot is lifted off the ground.
- To initiate the step forward with the right foot, push forward against the ground with the left foot to allow the hips to move forward as the right leg moves forward – keep the body aligned.
- This will keep the hips directly over the right foot as it hits the ground to encourage balance to be maintained on the new one foot base.
- As the right foot hits the ground the left foot toes will be releasing from their push-off position.
- With the hips directly over the right foot, the left leg will be swinging forward.
- As the left leg approaches the midline of the body, the right foot will now be pushing against the ground to keep the hips moving forward.
- This will keep the hips directly over the left foot as it hits the ground.
- Balance will be maintained over the new base.
- Repeat the entire process each right/left combination.
- The continuous movement forward of one foot after another will create a short contact time per base, which will actually aid the ability to stay balanced if the weight transfer is not exact. The next step can make the correction if necessary.
- A slower moving walk forces the participant to make near perfect balance decisions as they are on the single base (one foot) for a longer period of time.